

## DECLARATION FOR PATENT APPLICATION

Atty Docket No. TWI-6600

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

## APPARATUS FOR EVALUATING METALIZED LAYERS ON SEMICONDUCTORS

the specification of which (check one) \_\_\_\_\_ is attached hereto or  was filed on July 3, 1997 as Application No. 08/887,865 and was amended on \_\_\_\_\_ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

## Prior Foreign Application(s)

	Priority Claimed
Yes	No

Number	Country	Day/Month/Year Filed		

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) below.

Application Number	Filing Date

Application Number	Filing Date

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose all information which is material to patentability as defined in 37 CFR § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Application Number	Filing Date	Status: Patented, Pending, Abandoned

Application Number	Filing Date	Status: Patented, Pending, Abandoned

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under 18 U.S.C. § 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Jon Opsal

Inventor's signature J. Opsal

11/24/97

Date

Residence 2295 Norwood Road, Livermore, CA 94550

Citizenship U.S.A.

Post Office Address 2295 Norwood Road, Livermore, CA 94550

Full name of second joint inventor, if any, Li Chen

Inventor's signature L. Chen

11/24/97

Date

Residence 270 Franciscan Court #10, Fremont, CA 94539

Citizenship Chinese

Post Office Address 270 Franciscan Court #10, Fremont, CA 94539

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
APPLICATION FOR UNITED STATES PATENT**

In re Patent Application of	)	Group Art Unit: 2505
Jon Opsal, et al.	)	<b>POWER OF ATTORNEY BY ASSIGNEE</b>
Appn. No. 08/887,865	)	
Filed: July 3, 1997	)	
For: APPARATUS FOR EVALUATING METALIZED LAYERS ON SEMICONDUCTORS	)	

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Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

THERMA-WAVE, INC., assignee of the entire right title and interest in the above-identified application by assignment dated November 24, 1997, which assignment was recorded in the Patent and Trademark Office on March 2, 1998, at Reel 9020, frame 443, hereby appoints the members of the firm of LIMBACH & LIMBACH L.L.P., a firm composed of:

Karl A. Limbach	18,689	W. Patrick Bengtsson	32,456	Kyla L. Harriel	P-41,816
George C. Limbach	19,305	Mark A. Dalla Valle	34,147	Mayumi Maeda	40,075
John K. Uilkema	20,282	Charles P. Sammut	28,901	Kent J. Tobin	39,496
Neil A. Smith	25,441	Mark C. Pickering	36,239	Christine S. Ring	P-42,106
Veronica C. Devitt	29,375	Kathleen A. Frost	37,326	Michael R. Ward	38,651
Ronald L. Yin	27,607	Alan S. Hodes	38,185	Steven M. Santisi	40,157
Gerald T. Sekimura	30,103	Patricia Coleman James	37,155	Charles L. Hamilton	P-42,624
Michael A. Stallman	29,444	Alan A. Limbach	39,749	Andrew V. Smith	P-43,132
Philip A. Girard	28,848	Douglas C. Limbach	35,249	Heath W. Hoglund	41,076
Michael J. Pollock	29,098	Brian J. Keating	39,520	J. Thomas McCarthy	22,420
Stephen M. Everett	30,050	Seong-Kun Oh*			
Alfred A. Equitz	30,922	Cameron A. King	P-41,897		

\* Recognition under 37 CFR 10.9(b)

as its attorneys with full power of substitution to prosecute this application and to transact all business in the Patent and Trademark Office in connection therewith.

Please direct all correspondence regarding this application to the following:

LIMBACH & LIMBACH L.L.P.  
Attn: Michael A. Stallman  
2001 Ferry Building  
San Francisco, CA 94111

Telephone: (415) 433-4150  
Facsimile: (415) 433-8716

Date: 6/9/98

THERMA-WAVE, INC.

By: \_\_\_\_\_  
Name: Allan Rosencwaig  
Title: Chief Executive Officer





UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

MAY 06, 1998

PTAS

LIMBACH & LIMBACH L.L.P.  
MICHAEL A. STALLMAN  
2001 FERRY BLDG.  
SAN FRANCISCO, CA 94111

RECEIVED



\*100659974A\*

MAY 14 1998

Limbach & Limbach

TWI-6600

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/02/1998

REEL/FRAME: 9020/0443  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNEE'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNEE:  
OPSAL, JON

DOC DATE: 11/24/1997

ASSIGNEE:  
CHEN, LI

DOC DATE: 11/24/1997

ASSIGNEE:  
THERMA-WAVE, INC.  
1250 RELIANCE WAY  
FREMONT, CALIFORNIA 94539

SERIAL NUMBER: 08887865  
PATENT NUMBER:

FILING DATE: 07/03/1997  
ISSUE DATE:

STEVEN POST, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

To the Commissioner of Patents and Trademarks.

100659974

ments or copy thereof.

## 1. Name of conveying party(ies):

Jon Opsal and Li Chen

## 2. Name and address of receiving party(ies)

RECEIVED

MAR 02 1995

Name: THERMA-WAVE, INC.

Internal Address: 1250 Reliance Way

Street Address: 1250 Reliance Way

City, State and Zip: Fremont, CA 94539

RECEIPT

## Additional name(s) of conveying party(ies) attached?

 Yes  No

## 3. Nature of Conveyance:

Assignment       Merger  
 Security Agreement       Change of Name  
 Other

Execution Date: November 24, 1997

## Additional Name(s) &amp; address(es) attached?

 Yes  No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)  
08/887,865

B. Patent No.(s)

Additional numbers attached?  Yes  No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Michael A. Stallman

Internal Address: Limbach & Limbach L.L.P.  
 Street Address: 2001 Ferry Building  
 City, State, ZIP: San Francisco, California 94111  
 Telephone: (415) 433-4150  
 Facsimile: (415) 433-8716

Attorney Docket No. TWI-6600

## 6. Total number of applications and patents involved: 1

## 7. Total fee (37 CFR 3.41): ..... \$ 40.00

Enclosed  
 Charge any deficiencies in the enclosed fee to  
 Deposit Account No. 12-1420  
 Authorized to be charged to deposit account

## 8. Deposit account number: 12-1420

DO NOT USE THIS SPACE

## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Michael A. Stallman, Reg. No. 29,444  
Name of Person Signing

Signature

2/15/95

Date

03/12/1998 SSMITH 00000032 08887865  
40.00 00  
01 FC:581

Total number of pages including cover sheet, attachments and document: 3

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20213, and to the Office of Management and Budget, Paperwork Reduction Project, (0651-0011), Washington, D.C. 20503

ASSIGNMENT

WHEREAS, WE, Jon Opsal and Li Chen, hereinafter referred to as "ASSIGNORS", have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: APPARATUS FOR EVALUATING METALIZED LAYERS ON SEMICONDUCTORS

Application (Declaration/Oath) Execution Date: November 24, 1997

Filing Date: July 3, 1997 Application No.: 08/887,865

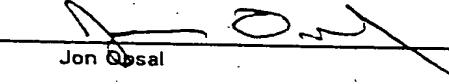
WHEREAS, THERMA-WAVE, INC., a corporation of the State of Delaware, 1250 Reliance Way, Fremont, CA 94539 hereinafter referred to as "ASSIGNEE", is desirous of acquiring the entire right, title and interest in the said invention and application and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for One Dollar (\$1.00) and other good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all right, title and interest in and to the said invention, said application for United States Letters Patent, and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions, reissues, prolongations or extensions thereof, said interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said Assignors had this assignment and transfer not been made, to the full end and term of any such Letters Patent.

Assignors further agree that they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement in any and all countries, and to vest title thereto in said Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below.

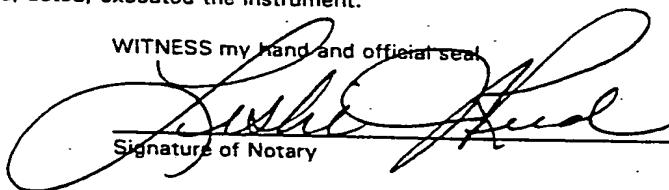
Date: Nov 24, 1997

  
Jon Opsal

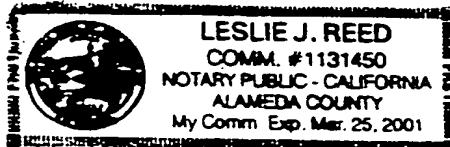
State of California  
County of Alameda

On Nov 24, 1997 before me, LESLIE J. REED personally appeared Jon Opsal personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

  
Signature of Notary

SEAL



IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the date indicated below.

Date: 11-24-97

*Li Chen*  
Li Chen

State of California  
County of Alameda

On 11-24-97 before me, LESLIE J. REED,  
personally appeared Li Chen personally known to me or proved to me on the basis of satisfactory evidence to be the  
person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed  
the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s),  
or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

*Leslie J. Reed*  
Signature of Notary

SEAL

